tive and level of analysis (macro or meso level), and whether regression correction should be performed. A limitation of the illustrative case study was that costs of sustainability activities were not collected.

PCN276

CRITICAL ASSESSMENT OF COST-SHARING SCHEMES USING A SIMPLE MODELING APPROACH

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OBJECTIVES: To critically assess cost-sharing schemes between payers and marketing authorization holders (MAHs) that are in some jurisdictions used as a means to control public spending on prescription drugs. **METHODS:** Cost-sharing scheme can be theoretically expressed as the two-step process, where the discount of the MAH equals p when $x \leq n$, and 0 when $x > n$, where n is the number of weeks/months with reduced price of a drug and x is the length of treatment in weeks/months. Within such a scheme, the overall discount has no lower limit as it is inversely proportional to x, i.e., np/x. Payers and MAHs may estimate and agree upon the expected length of treatment $x=m_0$ based on, e.g., randomized clinical trials (RCTs); however, these estimates may be unreliable due to, *inter alia*, market power of MAHs that could influence prescribers to select those patients that will remain longer on the treatment. **RESULTS:** Two-step cost-sharing scheme results in the effective discount that is lower than expected discount by $(x\text{-}m_0)/x$, once x surpasses m_0. The lower limit of the discount can be achieved if the two-step cost-sharing scheme is modified by an additional step: the discount then equals (i) p when $x \leq n$, (ii) 0 when $m_0 \geq x > n$, and (iii) np/m_0 when $x > m_0$. Cost-sharing scheme in this format guarantees that the effective discount remains at the expected level of np/m_0 and gives no incentive to MAHs to exert their market power and prolong treatment duration. We applied our simple model to a real-life case of innovative oncological drug (p=100%; n=6 weeks; m_0=30 weeks). **CONCLUSIONS:** We have shown that cost-sharing schemes should incorporate an additional step in order to ensure the effective control of expenditure for drugs. This finding may be of value to those jurisdictions that resort to cost-sharing as a tool in curtailing prescription drug costs.

PCN277

NEW REIMBURSEMENT SCHEMES FOR STRATIFIED MEDICINE IN ONCOLOGY – A SYSTEMATIC REVIEW

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OBJECTIVES: Limited data regarding effectiveness, efficacy, safety or cost-effectiveness at marketing authorization reflect uncertainties that payers try to counteract with performance-based risk-sharing arrangements (PBRSAs). PBRSAs link medicines' reimbursement to health outcomes and seem to reduce these uncertainties – especially for stratified medicine in oncology. We wanted to identify PBRSAs for stratified medicine in oncology to discuss advantages, disadvantages, their cost-effectiveness and whether they could reduce uncertainties. **METHODS:** A literature search was conducted in bibliographical databases from 2003-2013. Searching websites of reimbursement bodies from Australia, Canada, Germany, UK, USA and hand searching completed the search strategy. Publications were eligible if reimbursement for stratified medicine in oncology was linked to health outcomes. A self-developed checklist based on ISPOR Task Force Report on PBRSAs (Garrison et al., [Value Health. 2013; 16 (5): 703-19]) was used to conduct quality assessment. This checklist consists of five domains assessing the quality of a PBRSA: description, desirability and rationale, implementation, evidence collection and evaluation. **RESULTS:** We identified 43 publications resulting in 40 PBRSAs (Canada: 12, Italy: 9, UK: 7, Australia: 8, The Netherlands: 2, USA: 1, Slovenia: 1). Most schemes are related to leukemia (mainly dasatinib, imatinib and nilotinib). These PBRSAs were categorized in subcategories: risk sharing schemes (RSS) such as 'outcomes guarantees' (n=7), 'conditional treatment continuation' schemes (n=22), 'money back guarantees' (n=3) and coverage with evidence development schemes (CED) such as 'only in research' schemes (n=8). Quality assessment was limited by lack of reporting on PBRSAs' details. Therefore, ambiguity remains about PBRSAs' cost-effectiveness and their reduction of uncertainties. **CONCLUSIONS:** RSS provide faster access to therapies, guarantee reimbursement for manufacturers and possibly cost containment for payers, but do not necessarily collect additional evidence. The administrative burden and related costs appear to be huge. Existing value of information analysis approaches were not applied to CED schemes. Evaluations of PBRSAs are necessary to assess their value.

PCN278

ANTI-CANCER TREATMENTS IN ELDERLY (≥75 YEARS OLD) PATIENTS: A RETROSPECTIVE ANALYSIS

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OBJECTIVES: Primary: To describe the use of anti-cancer treatments in elderly patients (≥75 years of age) at the Davidoff Center between 2006 and 2013. Secondary: To investigate the correlations between anti-cancer treatments and socio-demographic- and cancer-related parameters. **METHODS:** The analysis included all elderly (≥75 years) cancer patients treated at the Institute of Oncology, Davidoff Center between 2006 and 2013. The analysis included Israeli residents (i.e., "medical tourists" were excluded). Patients who were treated elsewhere and had a single consultation appointment at the Davidoff Center were also excluded from the analysis. The following parameters were assessed: demographic variables, cancer diagnosis, chemotherapy and radiation treatments received, clinic visits, hospitalizations, and the utilization of other health-related services. **RESULTS:** Out of 21,009 new patients treated at the Davidoff Center between 2006 and 2013, 6, 553 patients (31%) were elderly. Of these patients, 31% received chemotherapy, 35.5% radiotherapy, and 10% both. The proportions of elderly patients receiving chemotherapy, radiation therapy, or both, remained stable throughout the study period. The most common indications for which elderly patients received chemotherapy included gastrointestinal (39%), lung (15%), breast (12%), and head and neck (9%) cancers. Overall, 17% of the elderly patients received >2 lines of chemotherapy protocols; a similar rate (16%) was observed in the subgroup of patients ≥85 years of age. **CONCLUSIONS:** Approximately 30% of the cancer population treated in a large tertiary cancer center were elderly patients (≥75 years of age). The findings of this study may promote a discussion regarding medical resources, staff training, and planning a designated evaluation for geriatric cancer patients that should include special consideration to the patients' comprehensive functioning.

PCN279

SYSTEMIC TREATMENT OF METACHRONOUS METASTASES AFTER CURATIVE TREATMENT OF BREAST CANCER

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OBJECTIVES: To describe systemic treatment of metachronous metastases and the reasons of not receiving systemic treatment in patients with breast cancer. **METHODS:** Patients diagnosed with breast cancer without metastasis at initial diagnosis (M0) between 2006-2008 were selected from the Eindhoven Cancer Registry. By means of active follow-up by the Cancer Registry staff until January 2012, data on development of metastatic disease, treatment, and reasons of not receiving systemic treatment were collected directly from the patient files. **RESULTS:** Of 1,382 patients diagnosed with M0 breast cancer, 116 (8%) developed metachronous metastases during a median follow-up of 4.4 years. Of the patients developing metachronous metastases, 86 (74%) patients received systemic treatment with a median (± SD) age of 59.7 (± 13.4) years. Of these, 46 patients (53%) received chemotherapy, 19 patients (22%) received hormonal therapy and 21 patients (24%) received a combination of chemotherapy and hormonal therapy. Median (± SD) age of the patients who did not receive systemic treatment (n=30) was 70.0 (± 15.9) years. Of the 67 patients receiving chemotherapy, 17 patients (25%) were treated with taxane containing chemotherapy as first-line treatment. Of the 30 patients without any systemic treatment, 10 patients received radiotherapy, 3 patients underwent surgery and 6 patients refrained from systemic treatment. Other reasons for not receiving systemic treatment were: extensiveness of metastases/life expectancy (n=4), death before first application of chemotherapy (n=4), high age (n=1), comorbidities (n=1) or bad experience with chemotherapy in the past (n=1). **CONCLUSIONS:** Of the initially M0 breast cancer patients who developed metastases during follow-up the majority received systemic treatment. A quarter of the patients did not receive systemic treatment, primarily due to other treatment policies, refraining from treatment or poor condition. This study provides more insight into the treatment of metachronous metastases in the Netherlands.

PCN280

CURRENT GUIDANCE FOR BRCA MUTATION TESTING IN OVARIAN CANCER PATIENTS

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OBJECTIVES: To describe current guidance on BRCA testing practices in patients with ovarian cancer (OC) in China, European countries, and US. **METHODS:** Guideline databases like National Guideline Clearinghouse, Guidelines International Network, and National Institute for Health and Care Excellence were searched for guidelines in both ovarian and breast cancer. Additionally, relevant medical societies like United States Preventive Services Task Force, National Society of Genetic Counselors, American Society of Clinical Oncology, European Society for Medical Oncology, European Society of Human Genetics, Chinese Society of Clinical Oncology, Chinese Academy of Medical Sciences, and International Cancer Genome Consortium were considered. Guidelines were included if they contained recommendations for BRCA testing in OC or patient characteristics for BRCA mutation in OC, were published after 2003, were currently valid, and published in English, Chinese or German language. **RESULTS:** The search revealed a total of 22 guidelines. Ten breast cancer guidelines were excluded because they did not add any information beyond that found in guidelines for OC. Ten out of 12 guidelines recommend genetic testing for healthy individuals with familial history of ovarian or breast cancer and a personal history of breast cancer. Most guidelines differ in their description of selection criteria such as degree of relationship between affected individuals and counselee, age at diagnosis, and individual history of early onset cancer. Five out of 12 guidelines also recommend screening for patients of Jewish Ashkenazi or Icelandic descent. **CONCLUSIONS:** Current guidance recommends genetic testing primarily for healthy individuals; a few guidelines recommend testing in diagnosed ovarian cancer patients. Using current recommendations a substantial number of patients with OC due to an inherited BRCA mutation are missed. With options for treatment aimed at mutation carriers, identification of all OC patients with BRCA mutation will facilitate a personalized therapy and identify family members at risk of cancer.

PCN281

PRESCRIBING PATTERN OF ANTI-EMETICS FOR PREVENTION OF CHEMOTHERAPY INDUCED NAUSEA & VOMITING—AN OBSERVATION OF CLINICAL PRACTICE VERSUS STANDARD GUIDELINES

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